

## WHAT IS CLAIMED IS:

1. A method for payment of a bill, comprising the steps of:
  2. a) calculating a total bill for a plurality of patrons;
  3. b) displaying the total bill to the plurality of patrons;
  4. c) receiving input information from a first one of the plurality of patrons to pay a first portion of the total bill using a first credit card account;
  5. d) automatically calculating, in response to the receiving step, a balance owed equal to the total bill minus the first portion;
  6. e) automatically displaying, in response to the automatically calculating step, the balance owed to the plurality of patrons; and
  7. f) repeating steps c) through e) until the balance owed equals zero.
1. 2. The method as recited in claim 1, wherein the total bill represents a total amount of money owed by the plurality of patrons for items purchased by the plurality of patrons.

1       3.     The method as recited in claim 2, wherein step f) further comprises the steps  
2     of:

3           g)     receiving input information from a second one of the plurality of  
4     patrons to pay a second portion of the total bill using a second credit card account;

5           h)     automatically calculating, in response to step g), a balance owed equal  
6     to the total bill minus the first and second portions;

7           i)     automatically displaying, in response to step h), the balance owed  
8     calculated in step h) to the plurality of patrons; and

9           f)     if the balanced owed calculated in step i) does not equal to zero,  
10    repeating steps g) through i) until the balance owed equals zero.

1       4.     The method as recited in claim 3, wherein step c) comprises the steps of:

2           receiving credit card account information associated with the first credit card  
3     account; and

4           receiving the first portion inputted by the first one of the plurality of patrons,  
5     and wherein step g) comprises the steps of:

6           receiving credit card account information associated with the second credit  
7     card account; and

8           receiving the second portion inputted by the second one of the plurality of  
9     patrons.

1       5. The method as recited in claim 4, wherein the receipt of credit card  
2 information further comprises the step of reading a magnetic strip on the credit card  
3 when it is swiped through a credit card reader.

1       6. The method as recited in claim 4, further comprising the step of:  
2           transmitting the input information received in steps c) and g) to one or more  
3 financial institutions.

1       7. The method as recited in claim 4, further comprising the steps of:  
2           requesting the first one of the plurality of patrons to include a first gratuity  
3 amount with the first input information, wherein the first portion includes the first  
4 gratuity amount; and

5           requesting the second one of the plurality of patrons to include a second  
6 gratuity amount with the second input information, wherein the second portion  
7 includes the second gratuity amount.

1       8. The method as recited in claim 7, further comprising the step of:  
2           requesting the plurality of patrons add an amount of gratuity to be added to the  
3 total bill before step c) is performed.

1        9. The method as recited in claim 8, wherein the first and second gratuity  
2 amounts equal to the amount of gratuity added to the total bill.

1        10. The method as recited in claim 4, wherein the total bill includes a gratuity  
2 selected by the plurality of patrons.

1        11. The method as recited in claim 4, further comprising the step of:  
2            visually indicating to the plurality of patrons that the total bill has not yet been  
3 paid when the balanced owed is greater than zero.

1        12. The method as recited in claim 11, further comprising the step of:  
2            visually indicating to the plurality of patrons that the total bill has been paid  
3 when the balanced owed is equal to zero.

1        13. The method as recited in claim 8, wherein the step of requesting further  
2 comprises the step of displaying to the plurality of patrons one or more suggested  
3 gratuity amounts.

1 14. The method as recited in claim 2, wherein step c) further comprises the step  
2 of:

3 receiving an input from the first one of the plurality of patrons of which of the  
4 items on the total bill to be included in the first portion.

1        15. In a restaurant, a method comprising the steps of:  
2            seating a plurality of patrons at a table;  
3            taking orders of food items from the plurality of patrons at the table;  
4            computing a total amount owed by the plurality of patrons for the ordered food  
5            items;  
6            displaying the total amount on a payment unit at the table;  
7            receiving and storing first credit card information from a first credit card  
8            swiped through a credit card reader by a first one of the plurality of patrons, wherein  
9            the credit card reader is part of the payment unit at the table;  
10            receiving and storing a first portion entered by the first one of the plurality of  
11            patrons into the payment unit, wherein the first portion represents an amount of  
12            money to be paid by the first one of the plurality of patrons by a debit to an account of  
13            the first credit card;  
14            automatically calculating, by the payment unit, a balanced owed on the total  
15            amount, wherein the balanced owed equals the total amount minus the first portion;  
16            automatically determining, by the payment unit, if the balanced owed equals  
17            zero;  
18            automatically displaying the balanced owed by the payment unit;  
19            if the balanced owed is greater than zero, receiving and storing second credit  
20            card information from a second credit card swiped through the credit card reader by a  
21            second one of the plurality of patrons;

22 receiving and storing a second portion entered by the second one of the  
23 plurality of patrons into the payment unit, wherein the second portion represents an  
24 amount of money to be paid by the second one of the plurality of patrons by a debit to  
25 an account of the second credit card;

26 automatically calculating, by the payment unit, a balanced owed on the total  
27 amount, wherein the balanced owed equals the total amount minus the first and  
28 second portions;

29 automatically determining, by the payment unit, if the balanced owed equals  
30 zero; and

31 automatically displaying the balanced owed by the payment unit.

1 16. The method as recited in claim 15, further comprising the step of:

2 if the balanced owed is equal to zero, transmitting the credit card information  
3 and payment information received by the payment unit for processing.

1 17. The method as recited in claim 15, wherein the step of computing the total  
2 amount includes the step of computing an applicable tax amount to be added as part  
3 of the total amount owed by the plurality of patrons.

1 18. The method as recited in claim 17, wherein the applicable tax amount is also  
2 displayed on the payment unit.

1        19. The method as recited in claim 15, further comprising the step of:  
2                illuminating a light of a first color on the payment unit indicating that the  
3                balance owed is not equal to zero.

1        20. The method as recited in claim 19, further comprising the step of:  
2                illuminating a light of a second color on the payment unit indicating that the  
3                balance owed is equal to zero.

1        21. The method as recited in claim 15, further comprising the steps of:  
2                computing a suggested gratuity to be paid by the plurality of patrons; and  
3                displaying the suggested gratuity on the payment unit.

1        22. The method as recited in claim 21, wherein the suggested gratuity is computed  
2                as a function of a percentage of the total amount, and further comprising the step of  
3                displaying the percentage with the displayed suggested gratuity.

1        23. The method as recited in claim 15, further comprising the steps of:  
2                displaying a request on the payment unit for the plurality of patrons to add a  
3                gratuity to the total amount.

1        24. The method as recited in claim 23, further comprising the step of:  
2            receiving an input from one of the plurality of patrons to add the gratuity to  
3            the total amount.

1        25. The method as recited in claim 24, wherein the first and second portions and  
2            the input are received through a numeric keypad on the payment unit.

1        26. The method as recited in claim 15, wherein the step of displaying the total  
2            amount on the payment unit at the table includes the step of displaying a list of the  
3            food items and their respective costs.

1        27. The method as recited in claim 26, wherein the list of food items and the total  
2            amount are displayed on a touch-sensitive screen on the payment unit.

1        28. The method as recited in claim 27, wherein the step of receiving and storing  
2            the first portion entered by the first one of the plurality of patrons into the payment  
3            unit is performed by recognizing one or more touches by the first one of the plurality  
4            of patrons of a selected one or more of the food items displayed on the touch-sensitive  
5            screen.

1 29. In a restaurant, a system comprising:  
2 a waiter's terminal for inputting orders of food items ordered by a plurality of  
3 patrons at a table;  
4 a first program code for computing a total amount owed by the plurality of  
5 patrons for the ordered food items;  
6 a payment unit physically located at the table;  
7 transmission circuitry for transmitting the total amount from the waiter's  
8 terminal to the payment unit;  
9 a display screen on the payment unit for displaying the total amount to the  
10 plurality of patrons;  
11 a credit card reader on the payment unit for receiving first credit card  
12 information from a first credit card swiped through the credit card reader by a first  
13 one of the plurality of patrons;  
14 a numeric input pad on the payment unit for receiving a first portion entered  
15 by the first one of the plurality of patrons, wherein the first portion represents an  
16 amount of money to be paid by the first one of the plurality of patrons by a debit to an  
17 account of the first credit card;  
18 a second program code for automatically calculating a balanced owed on the  
19 total amount, wherein the balanced owed equals the total amount minus the first  
20 portion;

21            a third program code for automatically determining if the balanced owed  
22            equals zero;

23            a fourth program code for automatically displaying the balanced owed on the  
24            display screen;

25            the credit card reader receiving second credit card information from a second  
26            credit card swiped through the credit card reader by a second one of the plurality of  
27            patrons when the balanced owed is greater than zero;

28            the numeric input pad receiving a second portion entered by the second one of  
29            the plurality of patrons, wherein the second portion represents an amount of money to  
30            be paid by the second one of the plurality of patrons by a debit to an account of the  
31            second credit card;

32            a fifth program code for automatically calculating a balanced owed on the total  
33            amount, wherein the balanced owed equals the total amount minus the first and  
34            second portions;

35            a sixth program code for automatically determining if the balanced owed  
36            equals zero; and

37            a seventh program code for automatically displaying the balanced owed on the  
38            display screen.

1       30. The system as recited in claim 29, further comprising:  
2                   circuitry for transmitting the credit card information and payment information  
3                   received by the payment unit for processing when the balanced owed is equal to zero.

1       31. The system as recited in claim 30, wherein the first program code for  
2                   computing the total amount includes program code for computing an applicable tax  
3                   amount to be added as part of the total amount owed by the plurality of patrons.

1       32. The system as recited in claim 31, wherein the applicable tax amount is also  
2                   displayed on the display screen of the payment unit at the table.

1       33. The system as recited in claim 29, further comprising:  
2                   a lamp of a first color illuminated on the payment unit indicating that the  
3                   balance owed is not equal to zero.

1       34. The system as recited in claim 33, further comprising:  
2                   a lamp of a second color illuminated on the payment unit indicating that the  
3                   balance owed is equal to zero.

1       35. The system as recited in claim 29, further comprising:  
2           an eighth program code for computing a suggested gratuity to be paid by the  
3           plurality of patrons; and  
4           the display screen displaying the suggested gratuity.

1       36. The system as recited in claim 35, wherein the suggested gratuity is computed  
2           as a function of a percentage of the total amount, and further comprising the display  
3           screen displaying the percentage with the displayed suggested gratuity.

1       37. The system as recited in claim 29, further comprising:  
2           program code for displaying on the display screen a request for the plurality of  
3           patrons to add a gratuity to the total amount.

1       38. The system as recited in claim 37, further comprising:  
2           the numeric input pad for receiving an input from one of the plurality of  
3           patrons to add the gratuity to the total amount.

1       39. The system as recited in claim 29, wherein the display screen is a  
2           touch-sensitive screen that displays a list of the food items and their respective costs.

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40. The system as recited in claim 39, wherein the receiving of the first portion entered by the first one of the plurality of patrons into the payment unit is performed by recognizing one or more touches by the first one of the plurality of patrons of a selected one or more of the food items displayed on the touch-sensitive screen.

SEARCHED AND SERIALIZED

1        41. A computer program product operable for implementing a method for  
2        payment of a bill, the computer program product readable by a data processing  
3        system, comprising the program steps of:

4            a) calculating a total bill for a plurality of patrons;  
5            b) causing a display of the total bill to the plurality of patrons;  
6            c) receiving input information from a first one of the plurality of patrons  
7        to pay a first portion of the total bill using a first credit card account;  
8            d) automatically calculating, in response to the receiving program step, a  
9        balance owed equal to the total bill minus the first portion;  
10           e) automatically causing a display, in response to the automatically  
11        calculating program step, of the balance owed to the plurality of patrons; and  
12           f) repeating program steps c) through e) until the balance owed equals  
13        zero.

1        42. The computer program product as recited in claim 41, wherein the total bill  
2        represents a total amount of money owed by the plurality of patrons for items  
3        purchased by the plurality of patrons.

1       43. The computer program product as recited in claim 42, wherein program step f)  
2 further comprises the program steps of:

3           g) receiving input information from a second one of the plurality of  
4 patrons to pay a second portion of the total bill using a second credit card account;

5           h) automatically calculating, in response to program step g), a balance  
6 owed equal to the total bill minus the first and second portions;

7           i) automatically causing a display, in response to program step h), of the  
8 balance owed calculated in program step h) to the plurality of patrons; and

9           f) if the balanced owed calculated in program step i) does not equal to  
10 zero, repeating program steps g) through i) until the balance owed equals zero.

1       44. The computer program product as recited in claim 43, wherein program step c)  
2 comprises the program steps of:

3           receiving credit card account information associated with the first credit card  
4 account; and

5           receiving the first portion inputted by the first one of the plurality of patrons,  
6 and wherein program step g) comprises the program steps of:

7           receiving credit card account information associated with the second  
8 credit card account; and

9 receiving the second portion inputted by the second one of the plurality  
10 of patrons.

1 45. The computer program product as recited in claim 44, wherein the receipt of  
2 credit card information further comprises the program step of causing a reading of a  
3 magnetic strip on the credit card when it is swiped through a credit card reader.

1 46. The computer program product as recited in claim 44, further comprising the  
2 program step of:

3 initiating a transmitting of the input information received in program steps c)  
4 and g) to one or more financial institutions.

1 47. The computer program product as recited in claim 44, further comprising the  
2 program steps of:

3 requesting the first one of the plurality of patrons to include a first gratuity  
4 amount with the first input information, wherein the first portion includes the first  
5 gratuity amount; and

6 requesting the second one of the plurality of patrons to include a second  
7 gratuity amount with the second input information, wherein the second portion  
8 includes the second gratuity amount.

1 48. The computer program product as recited in claim 47, further comprising the  
2 program step of:

3 requesting the plurality of patrons add an amount of gratuity to be added to the  
4 total bill before program step c) is performed.

1 49. The computer program product as recited in claim 48, wherein the first and  
2 second gratuity amounts equal to the amount of gratuity added to the total bill.

1 50. The computer program product as recited in claim 44, wherein the total bill  
2 includes a gratuity selected by the plurality of patrons.

1 51. The computer program product as recited in claim 44, further comprising the  
2 program step of:

3 causing a visual indication to the plurality of patrons that the total bill has not  
4 yet been paid when the balanced owed is greater than zero.

1 52. The computer program product as recited in claim 51, further comprising the  
2 program step of:

3 causing a visual indication to the plurality of patrons that the total bill has  
4 been paid when the balanced owed is equal to zero.

1       53. The computer program product as recited in claim 48, wherein the program  
2       step of requesting further comprises the program step of causing a display to the  
3       plurality of patrons of one or more suggested gratuity amounts.

1       54. The computer program product as recited in claim 42, wherein program step c)  
2       further comprises the program step of:

3               receiving an input from the first one of the plurality of patrons of which of the  
4       items on the total bill to be included in the first portion.

Q D E S E N T E D    D O C U M E N T

1        55. A payment unit operable for permitting a plurality of patrons to pay a bill at a  
2        table comprising:

3                receiving circuitry for receiving from a waiter's terminal a total amount owed  
4        by the plurality of patrons for ordered food items;

5                a display screen on the payment unit for displaying the total amount to the  
6        plurality of patrons;

7                a credit card reader on the payment unit for receiving first credit card  
8        information from a first credit card swiped through the credit card reader by a first  
9        one of the plurality of patrons;

10               a numeric input pad on the payment unit for receiving a first portion entered  
11        by the first one of the plurality of patrons, wherein the first portion represents an  
12        amount of money to be paid by the first one of the plurality of patrons by a debit to an  
13        account of the first credit card;

14               a first program code for automatically calculating a balanced owed on the total  
15        amount, wherein the balanced owed equals the total amount minus the first portion;

16               a second program code for automatically determining if the balanced owed  
17        equals zero;

18               a third program code for automatically displaying the balanced owed on the  
19        display screen;

20                   the credit card reader receiving second credit card information from a second  
21                   credit card swiped through the credit card reader by a second one of the plurality of  
22                   patrons when the balanced owed is greater than zero;

23                   the numeric input pad receiving a second portion entered by the second one of  
24                   the plurality of patrons, wherein the second portion represents an amount of money to  
25                   be paid by the second one of the plurality of patrons by a debit to an account of the  
26                   second credit card;

27                   a fourth program code for automatically calculating a balanced owed on the  
28                   total amount, wherein the balanced owed equals the total amount minus the first and  
29                   second portions;

30                   a fifth program code for automatically determining if the balanced owed  
31                   equals zero; and

32                   a sixth program code for automatically displaying the balanced owed on the  
33                   display screen.

1                   56.       The payment unit as recited in claim 55, wherein the first program code for  
2                   computing the total amount includes program code for computing an applicable tax  
3                   amount to be added as part of the total amount owed by the plurality of patrons.

1                   57.       The payment unit as recited in claim 56, wherein the applicable tax amount is  
2                   also displayed on the display screen of the payment unit at the table.

1        58. The payment unit as recited in claim 55, further comprising:  
2                    a lamp of a first color illuminated on the payment unit indicating that the  
3                    balance owed is not equal to zero.

1        59. The payment unit as recited in claim 58, further comprising:  
2                    a lamp of a second color illuminated on the payment unit indicating that the  
3                    balance owed is equal to zero.

1        60. The payment unit as recited in claim 55, further comprising:  
2                    a seventh program code for displaying a suggested gratuity to be paid by the  
3                    plurality of patrons.

1        61. The payment unit as recited in claim 60, wherein the suggested gratuity is  
2                    computed as a function of a percentage of the total amount, and further comprising  
3                    the display screen displaying the percentage with the displayed suggested gratuity.

1        62. The payment unit as recited in claim 55, further comprising:  
2                    program code for displaying on the display screen a request for the plurality of  
3                    patrons to add a gratuity to the total amount.

1 63. The payment unit as recited in claim 62, further comprising:  
2 the numeric input pad for receiving an input from one of the plurality of  
3 patrons to add the gratuity to the total amount.

1 64. The payment unit as recited in claim 55, wherein the display screen is a  
2 touch-sensitive screen that displays a list of the food items and their respective costs.

1 65. The payment unit as recited in claim 64, wherein the receiving of the first  
2 portion entered by the first one of the plurality of patrons into the payment unit is  
3 performed by recognizing one or more touches by the first one of the plurality of  
4 patrons of a selected one or more of the food items displayed on the touch-sensitive  
5 screen.

G E N E R A T E D B Y  
P A T E N T C O M P U T E R S